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PTO/SB/21 (08-00)

Approved for use through 10/31/2002, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

| | |
|------------------------|------------------|
| Application Number | 09/491,581 |
| Filing Date | January 25, 2000 |
| First Named Inventor | Shigeto Igarashi |
| Group Art Unit | 2612 |
| Examiner Name | |
| Attorney Docket Number | 2811 |

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ENCLOSURES (check all that apply)

| | | |
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| <input checked="" type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Reply | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | Petition To Make Special Under Rule 102(d) |
| <input type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application | | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

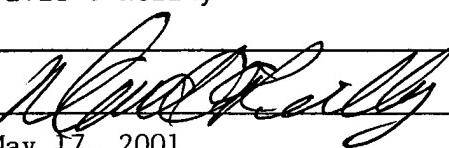
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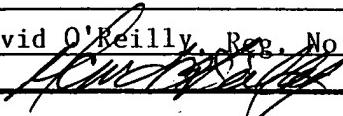
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

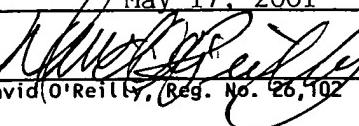
| | |
|-------------------------|---|
| Firm or Individual name | David O'Reilly |
| Signature |  |
| Date | May 17, 2001 |

CERTIFICATE OF MAILING

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| Typed or printed name | David O'Reilly, Reg. No. 26,102 |
| Signature |  |
| Date | May 17, 2001 |

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Date: May 17, 2001

By: 
David O'Reilly, Reg. No. 26,102



PTO/SB/17 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 130.00)

Complete If Known

| | |
|----------------------|------------------|
| Application Number | 09/491,581 |
| Filing Date | January 25, 2000 |
| First Named Inventor | Shigeto Igarashi |
| Examiner Name | |
| Group Art Unit | 2612 |
| Attorney Docket No. | 2811 |

METHOD OF PAYMENT

1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

| | |
|------------------------|----------------|
| Deposit Account Number | 15-0640 |
| Deposit Account Name | David O'Reilly |

 Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

 Applicant claims small entity status. See 37 CFR 1.27

2. Payment Enclosed:

| | | | |
|--------------------------------|--------------------------------------|--------------------------------------|--------------------------------|
| <input type="checkbox"/> Check | <input type="checkbox"/> Credit card | <input type="checkbox"/> Money Order | <input type="checkbox"/> Other |
|--------------------------------|--------------------------------------|--------------------------------------|--------------------------------|

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|----------------------------|----------------------------|-------------------------------|----------|
| 101 | 710 | 201 355 Utility filing fee | |
| 106 | 320 | 206 160 Design filing fee | |
| 107 | 490 | 207 245 Plant filing fee | |
| 108 | 710 | 208 355 Reissue filing fee | |
| 114 | 150 | 214 75 Provisional filing fee | |

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Independent Claims | -20** = | X = | |
| Multiple Dependent | -3** = | X = | |
| | | | = |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description |
|----------------------------|----------------------------|--|
| 103 | 18 | 203 9 Claims in excess of 20 |
| 102 | 80 | 202 40 Independent claims in excess of 3 |
| 104 | 270 | 204 135 Multiple dependent claim, if not paid |
| 109 | 80 | 209 40 ** Reissue independent claims over original patent |
| 110 | 18 | 210 9 ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$)

*or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | Small Entity | Fee Description | Fee Paid |
|-----------------------------------|---------------|---|--------------------------|
| Fee Code (\$) | Fee Code (\$) | | |
| 105 | 130 | 205 65 Surcharge - late filing fee or oath | |
| 127 | 50 | 227 25 Surcharge - late provisional filing fee or cover sheet | |
| 139 | 130 | 139 130 Non-English specification | |
| 147 | 2,520 | 147 2,520 For filing a request for ex parte reexamination | |
| 112 | 920* | 112 920* Requesting publication of SIR prior to Examiner action | |
| 113 | 1,840* | 113 1,840* Requesting publication of SIR after Examiner action | |
| 115 | 110 | 215 55 Extension for reply within first month | |
| 116 | 390 | 216 195 Extension for reply within second month | |
| 117 | 890 | 217 445 Extension for reply within third month | |
| 118 | 1,390 | 218 695 Extension for reply within fourth month | |
| 128 | 1,890 | 228 945 Extension for reply within fifth month | |
| 119 | 310 | 219 155 Notice of Appeal | |
| 120 | 310 | 220 155 Filing a brief in support of an appeal | |
| 121 | 270 | 221 135 Request for oral hearing | |
| 138 | 1,510 | 138 1,510 Petition to Institute a public use proceeding | |
| 140 | 110 | 240 55 Petition to revive - unavoidable | |
| 141 | 1,240 | 241 620 Petition to revive - unintentional | |
| 142 | 1,240 | 242 620 Utility issue fee (or reissue) | |
| 143 | 440 | 243 220 Design issue fee | |
| 144 | 600 | 244 300 Plant issue fee | |
| 122 | 130 | 122 130 Petitions to the Commissioner | 130.00 |
| 123 | 50 | 123 50 Processing fee under 37 CFR 1.17(d) | |
| 126 | 180 | 126 180 Submission of Information Disclosure Stmt | |
| 581 | 40 | 581 40 Recording each patent assignment per property (times number of properties) | |
| 146 | 710 | 246 355 Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 149 | 710 | 249 355 For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 | 710 | 279 355 Request for Continued Examination (RCE) | |
| 169 | 900 | 169 900 Request for expedited examination of a design application | |
| Other fee (specify) _____ | | | |
| *Reduced by Basic Filing Fee Paid | | | SUBTOTAL (3) (\$ 130.00) |

SUBMITTED BY

Complete (if applicable)

| | | | | | |
|-------------------|----------------|-----------------------------------|--------|-----------|---------------|
| Name (Print/Type) | David O'Reilly | Registration No. (Attorney/Agent) | 26,102 | Telephone | (805)446-2759 |
| Signature | | | | Date | May 17, 2001 |

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Docket No. 2811

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shigeto Igarashi

Group Art Unit: 2612

Serial No: 09/491,581

Filed: January 25, 2000

For: SIGNAL AMPLIFYING CIRCUIT IN CCD CAMERA

Westlake Village, CA

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

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PETITION TO MAKE SPECIAL UNDER RULE 102(d)

JUN - 6 2001

Sir:

Applicant in the above-identified application ~~TECHNOLOGY CENTER 2600~~ requests advancement of the examination of the application under Rule 102(d).

The undersigned, David O'Reilly, declares that he is the attorney of record in the above-identified pending patent application. That he is the attorney for applicant Shigeto Igarashi and is completely familiar with the invention disclosed and claimed in the application.

The invention is an electronic signal amplifying circuit for use with a charge coupled device (CCD) to broaden the range illumination to approximately 0.02 lux for recording images or taking photographs. In low light conditions, the amplification is increased with the signal to noise (S/N) ratio being ignored by automatically inserting an amplifying circuit that ignores

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Date: May 17, 2001

By: David O'Reilly, Reg. No. 26,102

the S/N until it reaches a predetermined value. When there is sufficient light conditions image recording or photograph are recorded at a high S/N ratio and a high degree of amplification.

All the claims in the application are limited to a single invention of an auxiliary amplifying circuit for use in low light conditions. The dependent claims are to variations of the system with the auxiliary amplifier such as the use of detectors to decide when to use the low light auxiliary amplifier.

A pre-examination search was made in Classes 348 subclass 255, and Classes 300, 301, 366, and 707. The references found in the thorough and complete search are listed in the attached form List of Prior Art Cited. Copies of these references are enclosed and are in addition to the references disclosed in the Disclosure To The Examiner filed May 30, 2000 incorporated herein by reference.

U.S. Patent No. 3,777,056 of Pieters removes glare by developing a reference value. The reference value is then compared with an amplifier output. The white amplitude level is clamped if there is glare.

U.S. Patent No. 4,884,140 of Park discloses a circuit to compensate for vignetting. Vignetting is a phenomenon of brightness at the circumference becoming lower than the central brightness. The patent compensates by obtaining parabolic waveform voltages, adding the voltages and using the added voltages to control amplification.

U.S. Patent No. 5,455,685 of Mori describes an exposure control device. The patent detects and integrates values representing the average light and then controls the operation of the iris and amplification to control exposure.

U.S. Patent No. 5,610,654 of Parulski et al discloses an automated exposure control system that uses a variable amplifier. A microprocessor controls the output of a programmable amplifier from values in a look-up table or by use of an algorithm.

U.S. Patent No. 5,614,948 of Hannah discloses a gain control amplifier having controls by applying various levels of gain to an image. The amplification of the gain control amplifier is continually updated by a processor which may be a computer that provides real time gain settings to the gain control amplifier.

U.S. Patent No. 5,742,340 of Alves discloses compensation to an automatic gain control amplifier using a fiber optic link. Fiber optic link 13 provides a reference voltage from a light sensing array to adjust AGC circuit 20.

U.S. Patent No. 5,978,024 of Lee discloses a system to compensate for "blooming". Blooming is a phenomena that occurs when a photo diode receives light having too high intensity. An anti-blooming circuit comprised of a DC stage 71, an input stage 72, and an anti-blooming stage 73 provides an output that

increases or decreases the bias on CCD 60.

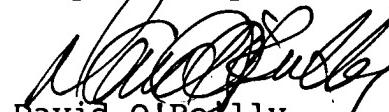
None of the patents discuss above or the references cited in the Disclosure to the Examiner filed May 30, 2000 teach or suggest a circuit for low light conditions that amplifies the signal while ignoring the signal to noise (S/N) ratio and then switching to higher signal to noise amplification when there is sufficient bright light as described in the claims.

The undersigned declares further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Please charge the cost of this Petition to Deposit Account No. 15-0640.

Consideration and approval of this petition is earnestly solicited.

Respectfully submitted,



David O'Reilly
Registration No. 26,102
Attorney for Applicant

Dated: May 17, 2001

DO'R/en

Enclosures

Make all calls to: (805) 446-2759

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Westlake Village, CA 91361